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IN THE UNITED STATES DISTRICT COURT  
FOR THE MIDDLE DISTRICT OF TENNESSEE

Civil Action No. 3:06-0611

EMPLOYERS INSURANCE COMPANY OF WAUSAU,

Plaintiff,

v.

MEDLINE INDUSTRIES, INC., and CREATIVE

BEDDING TECHNOLOGIES, INC.,

Defendants.

DEPOSITION OF HARRI K. KYTOMAA, Ph.D.

Thursday, October 4, 2007

10:05 a.m. to 1:25 p.m.

Cornell & Gollub

75 Federal Street

Boston, Massachusetts

Reporter: Lisa A. Moreira, RDR, CRR

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1	APPEARANCES	1	EXHIBITS
2		2	NO. DESCRIPTION PAGE
3	BROWN, DEAN, WISEMAN, LISER, PROCTOR & HART, L.L.P.	3	178A Photo 73
4	(BY: SANDRA LISER, ESQ.)	4	179A Photo 73
5	306 West 7th Street, Suite 200	5	180A Photo 73
6	Fort Worth, Texas 76102-4905	6	181A Photo 73
7	817.332.1391	7	182A Photo 73
8	Counsel for the Plaintiff	8	183A Photo 73
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10	SEGAL, McCAMBRIDGE, SINGER & MAHONEY	10	185A Letter to Tom Long from Inter-Tek, 3/27 98
11	(BY: JEFFREY SINGER, ESQ.)	11	186A Holliman deposition summary 99
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14	312.645.7800	14	
15	Counsel for the Defendant, Medline Industries, Inc.	15	
16		16	
17	CREMER, KOPON, SHAUGHNESSY & SPINA, LLC	17	
18	(BY: GREGORY J. McKENNA, ESQ.)	18	
19	180 N. LaSalle Street, Suite 3300	19	
20	Chicago, Illinois 60601	20	* Original exhibits retained by Attorney Singer
21	312.726.3800	21	
22	Counsel for the Defendant, Creative Bedding	22	
23	Technologies, Inc.	23	
24		24	
25		25	

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1	INDEX	1	PROCEEDINGS
2	DEPONENT DIRECT CROSS REDIRECT RECROSS	2	MS. LISER: Before we begin, I wanted to
3	HARRI K. KYTOMAA, Ph.D.	3	put on the record our agreement with defendants,
4	(By Ms. Lisser) 5	4	that this deposition is limited to the issues raised
5	(By Mr. Singer) 102	5	in defendant's motion for summary judgment, and that
6	(By Mr. McKenna) 111	6	if, in fact, Dr. Kytomaa -- did I say that right?
7		7	THE WITNESS: Sure.
8	EXHIBITS	8	MS. LISER: -- is designated later as an
9	NO. DESCRIPTION PAGE	9	expert in this lawsuit, that we would have the right
10	162A Affidavit 8	10	to depose him, if necessary.
11	163A Notes of inspection in Georgia, 4/19/07 34	11	MR. SINGER: So long as it's not
12	164A Draft Protocol For Mattress Testing 34	12	duplicative of what we're covering today.
13	165A Notes of testing 41	13	Is that all right with you?
14	166A Photo of innerspring array from burn test 55	14	MR. McKENNA: Yes.
15	167A Photo of innerspring array from burn test 55	15	HARRI K. KYTOMAA, Ph.D.,
16	168A Photo of another innerspring array 58	16	a witness called on behalf of the Plaintiff, having
17	169A Photo of another innerspring array 58	17	been satisfactorily identified by the production of
18	170A Photo of Nylex II innerspring mattress 64	18	his driver's license and duly sworn by the Notary
19	171A Photo of Nylex II innerspring mattress 64	19	Public, was deposed and testified as follows:
20	172A Photo 68	20	DIRECT EXAMINATION
21	173A Photo 73	21	BY MS. LISER:
22	174A Photo 73	22	Q. Would you please state your name for the
23	175A Photo 73	23	record.
24	176A Photo 73	24	A. My first name is Harri, H-a-r-r-i; middle
25	177A Photo 73	25	name Kaarlo, K-a-a-r-l-o; last name, Kytomaa,

<p style="text-align: right;">Page 6</p> <p>1 <b>K-y-t-o-m-a-a.</b></p> <p>2 Q. Dr. Kytomaa, you have been hired by Medline</p> <p>3 and Creative Bedding Technologies in a lawsuit filed</p> <p>4 by National Healthcare. Do you understand that?</p> <p>5 <b>A. Yes.</b></p> <p>6 Q. And do you understand that I represent</p> <p>7 National Healthcare?</p> <p>8 <b>A. Yes. Just as a qualifier here, really I was</b></p> <p>9 <b>retained by the office of Attorney Jeff Singer. So</b></p> <p>10 <b>for my purposes, although it's a subtle distinction,</b></p> <p>11 <b>I deal directly with Jeff Singer and his office</b></p> <p>12 <b>rather than the corporate entities you mentioned.</b></p> <p>13 MR. SINGER: And did you say that you</p> <p>14 represent National Healthcare?</p> <p>15 MS. LISER: Well, National Healthcare</p> <p>16 and the insurance company, yes.</p> <p>17 MR. SINGER: Well, I thought you</p> <p>18 represented the insurance company and the beneficial</p> <p>19 interest of National Healthcare.</p> <p>20 MS. LISER: Sure. If you want to</p> <p>21 clarify that on the record, go ahead.</p> <p>22 MR. SINGER: That's fine. I just think</p> <p>23 the record should be clear so Dr. Kytomaa is aware</p> <p>24 of that, too, because it's really not part of his</p> <p>25 involvement in this case as to who you represent or</p>	<p style="text-align: right;">Page 8</p> <p>1 original comes back?</p> <p>2 MR. SINGER: Sure.</p> <p>3 (Discussion off the record)</p> <p>4 (Document marked as Kytomaa Exhibit 162A</p> <p>5 for identification)</p> <p>6 Q. Dr. Kytomaa, I've handed you what's been</p> <p>7 marked Exhibit 162A. Is that the affidavit you just</p> <p>8 referred to?</p> <p>9 <b>A. Yes.</b></p> <p>10 Q. Who prepared that affidavit?</p> <p>11 <b>A. I prepared -- these are my words, and the</b></p> <p>12 <b>person who did the typing was Brian Eldridge.</b></p> <p>13 Q. I noticed that about midway through that</p> <p>14 affidavit there's a section where there's a bunch of</p> <p>15 asterisks where something was left out and something</p> <p>16 was added in.</p> <p>17 <b>A. Is that right?</b></p> <p>18 MR. McKENNA: Object to the form.</p> <p>19 MR. SINGER: Yes, I object to the form</p> <p>20 of that.</p> <p>21 <b>A. I don't know of anything being left out.</b></p> <p>22 Q. In Paragraph 17 --</p> <p>23 <b>A. Yes.</b></p> <p>24 Q. -- there are three asterisks, then you begin</p> <p>25 with Paragraph 18, and then there are three more</p>
<p style="text-align: right;">Page 7</p> <p>1 who I represent or who Mr. McKenna represents, but</p> <p>2 just in his role as a --</p> <p>3 MS. LISER: Normally I introduce myself</p> <p>4 to the witness. I apologize if that bothers you.</p> <p>5 Q. And Dr. Kytomaa, do you understand that your</p> <p>6 deposition today is limited to issues of the</p> <p>7 identity of the mattress involved in a fire at</p> <p>8 National Healthcare in Nashville, Tennessee?</p> <p>9 <b>A. Generally speaking, that's correct, yes.</b></p> <p>10 Q. Can you just briefly tell me what work</p> <p>11 you've done that's helped you form any opinions on</p> <p>12 identifying the mattress involved in the fire so I</p> <p>13 can know what areas to question you on.</p> <p>14 <b>A. Sure. Probably the best way to summarize</b></p> <p>15 <b>my -- the area of my work is what appeared in my</b></p> <p>16 <b>affidavit.</b></p> <p>17 Q. Okay.</p> <p>18 <b>A. And the summary of my work is that I've</b></p> <p>19 <b>performed a number of inspections and tests, and I</b></p> <p>20 <b>have also reviewed Mr. Hollman's deposition, based</b></p> <p>21 <b>on which I formed certain hypotheses, and I've</b></p> <p>22 <b>tested my hypotheses through my inspections and</b></p> <p>23 <b>testing.</b></p> <p>24 MS. LISER: Jeff, is it all right if we</p> <p>25 mark things out of this notebook as long as the</p>	<p style="text-align: right;">Page 9</p> <p>1 asterisks after Paragraph 27. Do you know what</p> <p>2 those are for?</p> <p>3 <b>A. Other than editorial beautification, I don't</b></p> <p>4 <b>know.</b></p> <p>5 Q. Okay. When you say they're your words, what</p> <p>6 do you mean?</p> <p>7 <b>A. What I mean by that is that the -- I had</b></p> <p>8 <b>long discussions with Brian Eldridge in creating</b></p> <p>9 <b>this document, but I didn't personally type the</b></p> <p>10 <b>document; he typed it. We discussed wording, and</b></p> <p>11 <b>essentially I instructed him as to what the wording</b></p> <p>12 <b>should be like.</b></p> <p>13 Q. Did you dictate the affidavit, or merely</p> <p>14 talk to Mr. Eldridge about your opinions and then</p> <p>15 he'd type it up from that conversation?</p> <p>16 <b>A. Some parts may have been, let's say,</b></p> <p>17 <b>dictated in the sense that we were on the phone and</b></p> <p>18 <b>he was writing down what I was saying, and some</b></p> <p>19 <b>parts were back and forth.</b></p> <p>20 Q. Were there then rewrites and edits of this</p> <p>21 affidavit between you and Mr. Eldridge?</p> <p>22 <b>A. There were. Essentially it was a document</b></p> <p>23 <b>that evolved over some period of time.</b></p> <p>24 Q. Do you have any of the draft affidavits?</p> <p>25 <b>A. No.</b></p>

3 (Pages 6 to 9)

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1 Q. And where would they be?

2 **A. There are none. We don't -- as a matter of**

3 **practice, I don't keep any such, let's say,**

4 **evolutionary stages of any document. The final**

5 **document is the document.**

6 Q. Okay. Did Mr. Eldridge actually send you

7 drafts of what he prepared to make sure you were

8 happy with the language?

9 **A. He may have, yes.**

10 Q. And are those e-mails retained on your

11 computer system?

12 **A. No. I wouldn't -- I would specifically not**

13 **keep any exchanges of documents that I know are not**

14 **in final form.**

15 Q. So is it your personal practice or Exponent's

16 practice that documents -- drafts of reports or

17 affidavits get deleted?

18 **A. Both.**

19 Q. And the correspondence between you and Mr.

20 Eldridge, the actual e-mail itself, are those

21 deleted also?

22 **A. To the extent that there is correspondence**

23 **that contains a document that is not in its final**

24 **form, yes, that would be deleted, too. But to the**

25 **extent that we have exchanges that don't involve**

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1 **documents that are not in their final form, I would**

2 **typically keep those.**

3 Q. So if any of the e-mails between you and Mr.

4 Eldridge actually contained discussions about your

5 opinions and what should be put in the affidavit,

6 you're going to delete that e-mail because the

7 affidavit is not finalized yet?

8 **A. Yes. If it's -- if we are talking about**

9 **issues that are sort of evolutionary in character, I**

10 **would not keep that, because I know that that is not**

11 **representative of what my final opinions will be and**

12 **so forth.**

13 Q. Do you know whether or not any of the

14 e-mails you exchanged with Mr. Eldridge concerning

15 your affidavit contain any substantive discussions

16 in the e-mail body itself?

17 **A. I would not really expect that to occur.**

18 Q. But you don't know if it did or didn't?

19 **A. The only, let's say, substance that may be**

20 **associated with such e-mails would be a possible**

21 **attachment of a sort of a version of the report as**

22 **it's being developed.**

23 Q. And so the e-mail body itself is not going

24 to discuss the report?

25 **A. I would not expect so.**

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1 Q. You wouldn't expect it, but you don't know?

2 **A. Well, put it this way, it's certainly not my**

3 **practice, and I don't believe it is Brian Eldridge's**

4 **practice either.**

5 Q. To put substantive information in an e-mail?

6 **A. Other than an attachment, which is the**

7 **document that we are developing.**

8 Q. Okay. What about the other communications

9 you've had with Mr. Eldridge or his law firm? Have

10 any of those been via e-mail?

11 **A. Yes.**

12 Q. And are those e-mails destroyed, or do you

13 keep those?

14 **A. I typically would keep those.**

15 Q. Even if they're just transmittal e-mails?

16 **A. If they're transmittal e-mails or things of**

17 **that nature, I would not necessarily, let's say,**

18 **delete them.**

19 **I'm sorry, let me be very clear.**

20 Q. Okay.

21 **A. If it's a transmittal or, for example, a**

22 **schedule of when we might meet, okay, something that**

23 **is factually accurate and not an evolving document,**

24 **I may well keep that. If it's a transmittal of a**

25 **document that is not in its final form, I would not**

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1 **keep that.**

2 Q. Of the paragraphs in your affidavit, can you

3 tell me which of the 40 paragraphs were written by

4 you and which ones were written by Mr. Eldridge?

5 **A. Well, all of these are in substance written**

6 **by me, but the physical typing was done by Mr.**

7 **Eldridge for all of them.**

8 Q. Can you tell the court and jury what

9 revisions Mr. Eldridge asked you to make to any

10 portion of the affidavit?

11 **A. Well, he didn't ask me to make; it was**

12 **really me asking him to make. So essentially the**

13 **way this went was Mr. Eldridge indicated that an**

14 **affidavit was necessary, and then we went about**

15 **developing this first based on a very long**

16 **discussion or, let's say, multiple discussions, and**

17 **he would essentially try to represent my opinions on**

18 **paper, and then I would, you know, essentially**

19 **correct them until I was satisfied that they were**

20 **representative of my opinions.**

21 Q. Do you know about how long this process took

22 from the first conversation about the affidavit to

23 it being completed?

24 **A. I don't really recall, but it probably would**

25 **have been something like on the order of maybe two**



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1 to three weeks, something like that. Maybe a little  
 2 less. I don't have an accurate, let's say, timing  
 3 of it.  
 4 Q. Do you have any other written reports or  
 5 statements that you have made involving the  
 6 identification of the mattress involved in this  
 7 fire?  
 8 A. None other than what's in front of you here.  
 9 Q. And that's these two notebooks?  
 10 A. Yes.  
 11 Q. When were you first retained by Medline or  
 12 Creative -- excuse me, by Mr. Singer's law firm?  
 13 A. Let me see. I have a document that reflects  
 14 the date in one of my binders.  
 15 So we were first retained in March of  
 16 2007.  
 17 Q. Was the scope of your retention in March of  
 18 2007 limited to the identification of the mattress,  
 19 or was it a broader scope?  
 20 A. The scope of the retention actually, in my  
 21 understanding, has not changed throughout this  
 22 matter, and it was pretty much defined to the scope  
 23 of my affidavit.  
 24 Q. So if your affidavit does not deal with, for  
 25 example, the combustibility of the mattress or its

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1 flammability characteristics, the scope of your  
 2 retention doesn't include those items either; is  
 3 that right?  
 4 A. Well, let me just answer specifically. I  
 5 was not asked to look at the combustibility of some  
 6 materials, but I was asked to look at the  
 7 combustibility of other materials. So in the case  
 8 of the mattress, to make -- that's a difficult  
 9 question to answer just as you asked it.  
 10 Q. And I agree with you completely now that you  
 11 point out components as to the entire finished  
 12 mattress.  
 13 The scope, to your understanding, from  
 14 the moment you've been retained by Mr. Singer's law  
 15 firm to the present day, is limited to the issues  
 16 addressed in your affidavit; is that right?  
 17 A. Yes.  
 18 Q. And if your affidavit does not address the  
 19 flammability characteristics of the completed entire  
 20 mattress, then the scope of your retention doesn't  
 21 cover that either; is that right?  
 22 A. I'm not sure --  
 23 Q. Badly worded question again?  
 24 A. Yes.  
 25 Q. I'm sorry.

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1 A. I'm not sure I understand your question.  
 2 Q. I'm actually just trying to find out if  
 3 you've been retained to offer any opinions on  
 4 whether any of the Nylex II mattresses meet any of  
 5 the flammability characteristics or standards such  
 6 as California TB 129 or California TB 603 or any of  
 7 those?  
 8 A. I was not asked to address the issue as to  
 9 whether these mattresses in question meet any of the  
 10 standards you identified.  
 11 Q. Okay. Thank you. And thank you for making  
 12 sure I get a good question.  
 13 When you were first retained by Mr.  
 14 Singer's law firm, were you given the issue of  
 15 whether or not the mattress involved in this fire  
 16 was a Nylex II innerspring mattress, or was that an  
 17 issue that you raised from your investigation?  
 18 A. I think both. That is, this was presented  
 19 to me, but as a matter of practice I -- you know,  
 20 these are the types of things that I would seek to  
 21 confirm independently, which I did, and so yes.  
 22 Q. Let me back up a question. If I understand,  
 23 then, all of the work that you have done since you  
 24 were retained in March of 2007 to today has  
 25 involved, to some extent, the identity of the

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1 mattress involved in the fire at NHC?  
 2 A. Yes, and then related questions associated  
 3 with the identity, yes.  
 4 Q. What do you mean by "related questions  
 5 associated with the identity"?  
 6 A. Well, for example, you know, if it -- well,  
 7 let me be specific.  
 8 If it were a Nylex II innersprung  
 9 mattress, how would it behave in a fire? And if it  
 10 were a Nylex or, let's say, a foam mattress without  
 11 innersprings, how would it behave in the fire?  
 12 That's what I mean by "related questions."  
 13 Q. Okay. Any other related questions you have  
 14 worked to answer?  
 15 A. There may be, but none that I recall right  
 16 now. My suggestion is as those arise, I'd be happy  
 17 to point them out, you know, in the context of  
 18 questions that you ask.  
 19 Q. It's probably more efficient that way  
 20 anyway.  
 21 What was the first activity you  
 22 undertook to try to determine the identity of the  
 23 mattress involved in this fire?  
 24 A. The first activity. You know, I don't  
 25 really remember exactly. What I can do is tell you

<p style="text-align: right;">Page 18</p> <p>1 specifically about my inspections and testing  2 because I have dates for those.  3 Q. Okay.  4 A. As to exactly, you know, what I read and so  5 forth, it's difficult for me to recall when I did  6 what, so probably the easiest thing is to tell you  7 the dates which I have here, the dates of my various  8 inspections.  9 So I was retained in March of 2007, and  10 then in May -- actually, in April I performed the  11 inspection in Marietta, which I believe you were  12 present also.  13 Q. That's correct.  14 A. April 19th. Then in May I performed tests  15 of mattresses, burn tests of mattresses, and then in  16 June I performed a second inspection in Nashville,  17 Tennessee.  18 Q. What was significant, if anything, from your  19 inspection in Georgia in April of 2007 toward your  20 opinions on the identification of the mattress?  21 Sorry.  22 A. Toward the identification of the mattress,  23 the significance there was the absence of the  24 innerspring array in the materials that we looked  25 at. But in addition to that, I also wanted to</p>	<p style="text-align: right;">Page 20</p> <p>1 were in Georgia in April of 2007, you were already  2 devising the test protocol to do the mattress burn  3 test?  4 A. Well, your memory is perhaps keener than  5 mine. I don't recall the exact timing of, you know,  6 when I was doing that. I really honestly don't.  7 Q. Well, you just mentioned that one of the  8 things that was significant about the configuration  9 of the bed frame itself is that you wanted to make  10 sure you were using a bed frame that was similar in  11 your test.  12 A. Right.  13 Q. Which made it sound like you were already  14 considering the test.  15 A. Oh, I see what you mean. My normal practice  16 is to -- and I think in answer to your question,  17 there's really two elements.  18 One is my normal practice of  19 documentation in inspections, where I try to  20 document everything that may be relevant without  21 necessarily knowing exactly why it may be relevant  22 to at that time, but trying to think broadly in that  23 way.  24 And the second aspect of it is that I  25 then used the information that I associated with the</p>
<p style="text-align: right;">Page 19</p> <p>1 understand the general configuration of the hospital  2 bed in question, which I documented and measured and  3 so forth.  4 Q. What was significant about the configuration  5 of the hospital bed on which the mattress was  6 resting?  7 A. A number of things. First, from the  8 photographs themselves, the absence of springs that  9 would have been associated with an innersprung  10 mattress, that's the first thing.  11 And the second thing really related to  12 tests that I wanted to do and to understand  13 essentially what the geometry of the hospital bed  14 was so that if I were to perform tests, it would be  15 testing on a bed, a hospital bed, that is  16 sufficiently similar.  17 Q. Were you involved in any way in the initial  18 investigation of this fire and the gathering of the  19 evidence?  20 A. I was not.  21 Q. Do you know if your employer, Exponent, was?  22 A. What I know is that Exponent at some stage  23 was involved. I don't know the nature of the scope  24 of our prior involvement.  25 Q. If I understood what you told me when you</p>	<p style="text-align: right;">Page 21</p> <p>1 documentation of that Marietta inspection later in  2 devising the protocol for tests.  3 So as to whether that's what I was  4 thinking at the time, I really don't know or recall  5 that, but I did use this information in that manner  6 at some later time.  7 Q. Have you discussed with anyone the steps  8 that were taken in the evidence-gathering initially  9 after the fire to make sure that all relevant  10 evidence was gathered, maintained, and documented?  11 A. I certainly had discussions with Brian  12 Eldridge and maybe with Attorney Singer regarding  13 what the collection of materials or evidence is that  14 exists in this case, but as to your question as to  15 how, I'm not sure I've had such discussions.  16 Q. If I understand your affidavit, you base  17 your opinion in large part upon the absence of  18 bedsprings in the remnants of the mattress that was  19 involved in the fire; is that correct?  20 A. Yes.  21 Q. And do you base the opinion that there were  22 no bedsprings solely upon the photograph you  23 reference of Ms. Tolston's remains in that bed?  24 A. No. I mean, I base it on a number of  25 things; Mr. Hollman's testimony, the photograph that</p>

6 (Pages 18 to 21)

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1 there are no bedsprings, the fact that no bedsprings  
2 were collected into any of the bodies of evidence,  
3 if you can call them that, in Marietta or Nashville,  
4 Tennessee. So there's -- and the fact that if there  
5 had been bedsprings in a mattress that went through  
6 these fires, the bedsprings would have survived.

7 So there are a number of things that I'd  
8 say I base that opinion on.

9 Q. Let me make sure I've got the number  
10 complete. The testimony of Bob Hollman, an employee  
11 of NHC, correct?

12 A. Yes.

13 Q. The photographs of Ms. Tolston in the bed?

14 A. Yes.

15 Q. And then the gathering of evidence, and the  
16 fact that you've looked at evidence in Nashville and  
17 in Marietta, Georgia, and there are no bedsprings?

18 A. Yes. I've looked through all of the  
19 materials that could have contained bedsprings and  
20 there are no bedsprings.

21 Q. Okay. Does anything else compile that  
22 number of things that support your opinion that  
23 there were no bedsprings?

24 A. And also my testing that indicates that --  
25 that is, I think, testing, personal experience,

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1 knowledge, and training that goes to the opinion  
2 that I would not expect bedsprings to be destroyed  
3 in the fire.

4 Q. And I probably haven't had enough coffee, so  
5 I was asking a bad question.

6 It's your opinion that there were no  
7 bedsprings in the mattress that Ms. Tolston was  
8 resting on at the time of the fire, right? And  
9 that's really all I'm looking at. What supports  
10 that opinion, that the mattress she was on had no  
11 bedsprings?

12 A. You lost me.

13 Q. Sure. Well, let me -- it's my understanding  
14 that you believe that the mattress Ms. Tolston was  
15 resting on did not have any innerspring component  
16 because you see no evidence of an innerspring  
17 component; is that right?

18 A. After the fire, that's correct.

19 Q. Okay. And the evidence that supports your  
20 opinion that there was no innerspring in the  
21 mattress being used by Ms. Tolston is the pictures  
22 of her, Mr. Hollman's testimony, and the fact that  
23 you've looked at the evidence that's been gathered  
24 and stored and you found no burned innerspring unit?

25 A. So the thing that confuses your question for

Page 24

1 me is that Mr. Hollman testifies to the fact that  
2 the mattresses, the Medline mattresses, were all  
3 innersprung mattresses, okay? So there's  
4 essentially information associated with what kind of  
5 Medline mattresses he had purchased and knew about.

6 Q. Right.

7 A. That's one piece of information. And the  
8 second piece of information is everything to do  
9 with, you know, what was kept after the fire, what  
10 did we see after the fire was put out and so forth,  
11 okay?

12 So there are really two types of  
13 information in the list of things that you mentioned  
14 in your question that have a different type of  
15 meaning in the context of my investigation.

16 Q. And I guess what I'm trying to understand  
17 is, from the information that we've been provided --  
18 and I believe Mr. Singer and Mr. Eldridge have, too  
19 -- the Nashville Fire Department destroyed the fire  
20 scene within five or six hours, gathered up all the  
21 evidence, placed it in piles, and the remnants of  
22 the mattress were taken by some investigator to his  
23 home in a garage and was kept until it was released.  
24 And I'm trying to find out if you know any of those  
25 facts?

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1 A. I have not -- in fact, those facts I'm not  
2 aware of, and I have not, let's say, studied the  
3 background associated with that kind of information.

4 MR. SINGER: And I have to offer an  
5 objection to the form of the question, because  
6 there's no evidence as yet in this case that  
7 supports the hypothetical that Ms. Liser has  
8 provided on the record.

9 MR. McKENNA: I join in that objection,  
10 please.

11 MS. LISER: You know, guys, if you want,  
12 I don't mind saying that one objection is good for  
13 both of you so you don't have to --

14 MR. McKENNA: Thank you.

15 Q. If, in fact, that was true, and the evidence  
16 was not well-preserved, well-gathered, well-  
17 documented, would that limit the reliability of the  
18 fact that today or in 2007 there are no innerspring  
19 bed units for you to look at in any of the two  
20 places evidence is stored?

21 MR. SINGER: Object to the form of the  
22 question.

23 A. I don't think so.

24 Q. Okay. You mean whether the evidence was  
25 gathered correctly and documented correctly and not



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1 destroyed immediately after the fire would not  
2 affect how much reliance you could place on what you  
3 see today in 2007?

4 MR. SINGER: Same objection.

5 **A. I think -- I mean, your question is a very**  
6 **general one, so it's very difficult to answer a**  
7 **general question of that character. And I think**  
8 **generally, you know, yes, there may be problems, but**  
9 **if we look specifically now at the evidence -- for**  
10 **example, the fact that when Mrs. Tolston was on the**  
11 **bed, photographs were taken at that time before,**  
12 **let's say, clearing of evidence and the such.**

13 Q. Okay.

14 **A. And those photographs speak for themselves.**  
15 **And if then, let's say, after those**  
16 **photographs were taken, say things were done in such**  
17 **a manner as to possibly not keep all of the evidence**  
18 **or things of the kind that you spoke of in your**  
19 **question, that would not influence the significance**  
20 **of the photographs themselves.**

21 Q. That's actually a much better made point  
22 than I was trying to make -- than I was doing,  
23 Doctor. Really the only thing that we have that is  
24 not subject to either interpretation or spoliation  
25 that tells us that there wasn't an innerspring unit

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1 in this mattress were the pictures of Ms. Tolston  
2 when she's still on the bed?

3 MR. SINGER: Well, I'll object to that.  
4 I believe it's argumentative. Object to the form of  
5 the question, but you can answer.

6 **A. Based on the information I have, I don't**  
7 **think you are right.**

8 Q. And why not?

9 **A. I have no information that suggests that**  
10 **there was improper handling of evidence.**

11 Q. And if there was improper handling, then  
12 that would raise some doubt about the evidence we  
13 see today. You just don't know if that happened or  
14 not.

15 **A. Well, I don't know whether that's the case**  
16 **either, because we'd have to take this hypothetical**  
17 **handling of evidence that you talk about in the**  
18 **context of what is not so hypothetical, and then**  
19 **essentially make an interpretation as to whether it**  
20 **has any influence on final opinions.**

21 Q. You would, of course, Doctor, have to take  
22 into consideration to some extent, even limited, how  
23 the evidence was handled between the time it was  
24 gathered and the time you saw it a number of years  
25 later.

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1 **A. Well, I mean, I've not taken it into**  
2 **consideration other than having looked through all**  
3 **of the materials that were kept as evidence, and**  
4 **I've also reviewed the photographs that were taken**  
5 **by the bomb and arson squad. And in light of the**  
6 **scope of my work, I'm not sure that that's directly**  
7 **relevant at this time.**

8 Q. Aren't you making a presumption, Doctor,  
9 that all of the relevant evidence was kept and made  
10 available for you to examine in 2007?

11 **A. So the presumption I'm making is that I've**  
12 **looked at all of the evidence that's available, and**  
13 **I didn't see innersprings in those materials, and**  
14 **I've looked at the bomb and arson squad photographs,**  
15 **and I see no innersprings, you know, of an array**  
16 **that's actually substantive in the sense that you**  
17 **wouldn't really miss it.**

18 **So I don't -- you know, in light of the**  
19 **types of materials that were kept as evidence, it**  
20 **seems to me that that would have been kept, had it**  
21 **been there, and it would also have been obvious in**  
22 **the photographs. Okay?**

23 **So all the information that I have right**  
24 **now speaks to me with respect to the innerspring**  
25 **specifically, that they're not there. They're not**

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1 **in the photographs. I don't think they were there,**  
2 **and I don't think that improper handling of some**  
3 **other evidence impacts the innersprings at this time**  
4 **based on the information that I have.**

5 Q. Surely mishandling of the remains of the  
6 mattress would have some relevance to what was left  
7 of the mattress, correct, if that occurred?

8 **A. Not necessarily, because actually a**  
9 **significant component of my opinions here really**  
10 **rest on the least flammable component of the**  
11 **innersprung mattress, namely the innerspring array,**  
12 **all right? So if, let's say, ticking or foam**  
13 **components did remain, and if they were, let's say,**  
14 **mishandled, as you say, for which I don't have**  
15 **independent confirmation, that would not influence**  
16 **my opinions. I didn't really look at those types --**  
17 **those components of the mattress, and I didn't**  
18 **attempt to look at those components of the mattress.**

19 Q. I just want to make sure I understand,  
20 Doctor. I know we have the photographs. And I know  
21 there may be disputes over what the photographs show  
22 or don't show, but we have the photographs.

23 **But as far as the fact that you have**  
24 **looked at evidence being kept in Nashville and**  
25 **evidence being kept in Georgia, you are presuming**



<p style="text-align: right;">Page 30</p> <p>1 that if there were bedsprings as part of this  2 mattress, that those would have been kept and made  3 available at one of those two locations in order to  4 reach your opinion that the absence of any bedspring  5 unit means that there were no bedsprings in the  6 mattress; isn't that correct?  7 <b>A. Well, not really, because I've reviewed many  8 photographs.</b>  9 Q. We're taking the photographs out.  10 <b>A. Right.</b>  11 Q. I'm just asking -- just on the absence of  12 bedsprings being made available at one of those two  13 locations, you're presuming that had they been in  14 Ms. Tolston's mattress, they would have been kept  15 and stored?  16 <b>A. Right. See, from a technical standpoint, I  17 can't make that leap. I can't now suddenly not look  18 at the photographs because it's really integral to  19 my investigation on this issue, right? So I can't  20 now -- I'll say I can't answer that question, and I  21 can only answer it in the context of what I've seen  22 through photographs because I've spent a lot of time  23 looking at photographs.</b>  24 MR. SINGER: Can I just ask for the  25 record, when you're talking about photographs, we're</p>	<p style="text-align: right;">Page 32</p> <p>1 <b>A. Based on what was kept, that's correct.</b>  2 Q. Okay.  3 <b>A. Yes.</b>  4 Q. Was there anything else that you learned in  5 your investigation or examination of the evidence in  6 Georgia in April of 2007 that has supported your  7 opinions about the identity of the mattress being  8 used by Ms. Tolston?  9 MR. SINGER: I just want to offer an  10 objection. I don't believe his testimony is that  11 he's going to opine what mattress was on Ms.  12 Tolston's bed. I believe what his testimony's been  13 so far and what's in the affidavit is that he can  14 offer opinions that an innerspring coil Nylex II  15 mattress was not on that bed.  16 So maybe that's a semantic distinction,  17 but I object to the form of the question because I  18 think you're misstating what his opinions are.  19 MS. LISER: Let's figure out how we want  20 to call it, because if I use that -- we'll be here  21 for two days if I have to say that every time I ask  22 a question about the identity of the mattress.  23 MR. SINGER: That's fair. I just want  24 the record to be clear that I think you may be  25 inadvertently misstating the opinions he has formed</p>
<p style="text-align: right;">Page 31</p> <p>1 talking about bomb and arson?  2 MS. LISER: That's what he's talking  3 about.  4 MR. SINGER: I'm not sure if anyone  5 reading the transcript will know exactly what  6 photographs are being referred to now. That's why I  7 bring that up. Thank you.  8 Q. Surely you'll admit, Doctor, that it is  9 possible that someone threw away an innerspring bed  10 unit before it was provided to any of the attorneys  11 or the investigators to keep?  12 <b>A. Based on the information that I've reviewed,  13 I would say no.</b>  14 Q. That it's impossible?  15 <b>A. Yes, because it is a huge piece of evidence.  16 A lot of stuff that was kept was much smaller than  17 this. This is an enormous thing that almost is the  18 size of an entire mattress.</b>  19 Q. Okay.  20 <b>A. So I cannot imagine, based on what I've  21 reviewed so far, that that would have been done. I  22 just can't imagine it.</b>  23 Q. Okay. So your testimony is that it is  24 impossible that someone would have discarded that or  25 not kept it?</p>	<p style="text-align: right;">Page 33</p> <p>1 in this case which are set out in his affidavit. So  2 why don't you reask your question.  3 MS. LISER: Yes, let me try again. I  4 understand your point. I'm trying to be a little  5 shorthand so we can all catch planes and go home.  6 Q. If I understand from what Mr. Singer said,  7 your opinion is going to be limited to the fact that  8 the mattress being used by Ms. Tolston at the time  9 of the fire did not include an innerspring unit; is  10 that correct?  11 <b>A. That's correct.</b>  12 Q. Are you offering any opinions about the  13 identity of the mattress that Ms. Tolston was using  14 other than it didn't have an innerspring unit?  15 <b>A. No.</b>  16 Q. Can, then, we have an agreement that when I  17 ask you about opinions on the identity of the  18 mattress, that I'll try to be better, but what we  19 are talking about is your opinion that the mattress  20 being used by Ms. Tolston did not have an  21 innerspring unit? Do you want me to try that one  22 again?  23 <b>A. No, I agree with that.</b>  24 Q. Okay.  25 (Recess taken)</p>

<p style="text-align: right;">Page 34</p> <p>1 (Document marked as Kytomaa Exhibit 163A 2 for identification) 3 BY MS. LISER 4 Q. Dr. Kytomaa, I've handed you -- or the court 5 reporter has -- Exhibit 163A. Can you tell me what 6 that is? 7 <b>A. These are my notes of the April 19, 2007 8 inspection in Marietta, Georgia.</b> 9 Q. Okay. Looking at your notebook, that is the 10 only page of notes that I found that looks like they 11 reference that examination. Would that be correct? 12 <b>A. That's correct.</b> 13 Q. And you did take a series of photographs 14 during that evidence examination? 15 <b>A. That's correct.</b> 16 Q. Then if I went -- if I understood your 17 earlier testimony, the next major activity you 18 undertook was the testing of the mattresses; is that 19 right? 20 <b>A. That's correct.</b> 21 (Document marked as Kytomaa Exhibit 164A 22 for identification) 23 Q. Can you tell me what Exhibit 164A is? 24 <b>A. This is the draft protocol for mattress 25 testing.</b></p>	<p style="text-align: right;">Page 36</p> <p>1 follow the protocol set out in California Technical 2 Bulletin 603 in its entirety? 3 <b>A. Right. I mean, two things essentially.</b> 4 <b>There was no reason to follow that standard or any 5 other standard; and the second reason really is that 6 the purpose of these tests was to determine how 7 innersprung mattresses and noninnersprung mattresses 8 would look after the mattress had burned, which is a 9 scope that is significantly different than Technical 10 Bulletin 603's scope.</b> 11 Q. And for the jury, what is the scope of 12 Technical Bulletin 603? 13 <b>A. Well, it's really a test associated with the 14 flammability of mattresses that primarily looks at 15 the heat release rate; that is, you know, how the 16 fire grows and spreads.</b> 17 Q. Did you keep data of the heat release rate 18 during the testing that you did in May of 2007? 19 <b>A. Not only did I not, let's say, keep notes of 20 it, I didn't measure it, because it wasn't the 21 purpose of the testing that I undertook.</b> 22 Q. The lab at which you did the testing, did 23 they run their normal test protocol and keep records 24 of what the heat release rate was throughout that 25 test or throughout those tests?</p>
<p style="text-align: right;">Page 35</p> <p>1 Q. What protocol did you ultimately use? Your 2 affidavit references both TB 603 and CFR 1633. 3 <b>A. Yes. I'm not sure I understand your 4 question.</b> 5 Q. Sure. Did you use -- did you follow a 6 testing protocol that is set in one of the full- 7 scale fire tests for mattresses, like TB 603? 8 <b>A. The test protocol that I used is what's 9 spelled out in my affidavit as well as this, being 10 the document entitled "Draft Protocol For Mattress 11 Testing," okay? So the only component of TB 603 is 12 as is spelled out in the draft protocol, which is 13 Exhibit 164A in Sections 5, 7, and 9. All of those 14 speak to the fact that we used a TB 603 burner.</b> 15 So really it's in reference to a 16 component that was used -- sort of let's say a 17 component that was used to ignite the mattress. And 18 so when you -- in your question, when you 19 essentially imply that we followed a standard, we 20 didn't really follow a standard of testing, we 21 followed the draft protocol that we have here, which 22 is Exhibit 164A, but we then elected to use the 23 burner that is used in TB 603 as a means of a 24 condition of the mattress. 25 Q. Was there a reason why you decided not to</p>	<p style="text-align: right;">Page 37</p> <p>1 <b>A. The lab that I used to perform these tests 2 did the tests in accordance with the protocol that I 3 provided to them, so they did what Exhibit 164A 4 says.</b> 5 Q. So I'm not sure I made my question clear. 6 No matter what your protocol says, did the lab keep 7 records of the heat release rate of the mattresses 8 during the four tests you ran? 9 <b>A. I'm not sure I understand your question 10 fully.</b> 11 Q. Sure. I know that your protocol doesn't 12 require it, but did the lab keep it anyway, or did 13 they obtain that data during the tests? 14 <b>A. So you're suggesting that the lab might have 15 done things other than what I asked them to do in 16 the protocol, I suppose, right?</b> 17 Q. Gather data during a test, yes. 18 <b>A. So no, the lab did only what I asked them to 19 do. They didn't go and do things -- we were 20 actually -- Attorney Singer's office was essentially 21 paying for the tests, so we only -- I wrote the 22 protocol for my purposes, and the way these labs 23 work is, they will charge you for what they do for 24 you, so they tend not to do extra things that they 25 will then charge you for.</b></p>

<p style="text-align: right;">Page 38</p> <p>1 Q. Okay.</p> <p>2 <b>A. And if you're not paying for them, they</b></p> <p>3 <b>won't do them. So they did what we asked them to</b></p> <p>4 <b>do, and that's it.</b></p> <p>5 Q. All right. So you can affirmatively state</p> <p>6 that if I contact the lab down in Texas, they are</p> <p>7 not going to have data showing what the heat release</p> <p>8 rate was during the four tests that you ran?</p> <p>9 <b>A. That's correct.</b></p> <p>10 Q. Other than the fact that it would have cost</p> <p>11 Medline additional money to obtain -- excuse me, Mr.</p> <p>12 Singer's firm to collect that data, was there any</p> <p>13 other reason why you didn't collect the rate of heat</p> <p>14 release during these tests?</p> <p>15 <b>A. Well, let me just say that the preface of</b></p> <p>16 <b>your question there is actually a misrepresentation</b></p> <p>17 <b>of what I said --</b></p> <p>18 Q. I apologize.</p> <p>19 <b>A. -- in the sense that this is not a money</b></p> <p>20 <b>question. The money issue that I pointed out is</b></p> <p>21 <b>that labs don't voluntarily do things that you don't</b></p> <p>22 <b>ask them to do. That was the point I was trying to</b></p> <p>23 <b>make.</b></p> <p>24 <b>And so, I'm sorry, what was the</b></p> <p>25 <b>question?</b></p>	<p style="text-align: right;">Page 40</p> <p>1 <b>specifically this lab, for some other things.</b></p> <p>2 Q. And do you know if when Exponent has used</p> <p>3 Inter-Tek in the past for full-scale fire tests,</p> <p>4 whether they have collected the rate of heat release</p> <p>5 data during the test?</p> <p>6 MR. SINGER: Let me offer an objection</p> <p>7 to the form of the question, because he has not</p> <p>8 testified that they've done full-scale fire tests</p> <p>9 for Exponent.</p> <p>10 MS. LISER: I'm sorry, I thought he said</p> <p>11 his company had used Inter-Tek for those kind of</p> <p>12 tests. I apologize.</p> <p>13 <b>A. What I said was that I had not used them,</b></p> <p>14 <b>and Exponent had used them for some other things.</b></p> <p>15 <b>The reason why I left it so vague is that I don't</b></p> <p>16 <b>know what those other things are other than, yes, we</b></p> <p>17 <b>have used that lab.</b></p> <p>18 <b>So I don't know that we have used Inter-</b></p> <p>19 <b>Tek for what you call full-scale tests, which is a</b></p> <p>20 <b>concept that I think could mean different things to</b></p> <p>21 <b>different people.</b></p> <p>22 Q. Okay. Any other reason why you didn't</p> <p>23 gather the rate of heat release of the four burning</p> <p>24 mattresses?</p> <p>25 MR. SINGER: Objection, asked and</p>
<p style="text-align: right;">Page 39</p> <p>1 Q. Certainly. Why didn't you ask the lab to</p> <p>2 record the data of the rate of heat release</p> <p>3 throughout the four tests you ran?</p> <p>4 <b>A. Because that wasn't -- for the purpose of my</b></p> <p>5 <b>testing, I had no need for that information. Again,</b></p> <p>6 <b>the purpose of my testing was to determine what an</b></p> <p>7 <b>innersprung mattress looks like after it has burned</b></p> <p>8 <b>and what a foam mattress without an innerspring</b></p> <p>9 <b>array looks like after it has burned. So neither of</b></p> <p>10 <b>those questions have anything to do with the heat</b></p> <p>11 <b>release rate, so that would have been somewhat</b></p> <p>12 <b>irrelevant to my testing, if you will.</b></p> <p>13 Q. Was that data that could have been gathered</p> <p>14 during the test if you wanted it done?</p> <p>15 <b>A. Oh, absolutely. I mean, I think that, you</b></p> <p>16 <b>know, there are a lot -- in fact, this lab in</b></p> <p>17 <b>particular will do many things that they're capable</b></p> <p>18 <b>of doing if you want it done. But we don't randomly</b></p> <p>19 <b>ask them to do things; we ask them to do</b></p> <p>20 <b>specifically what we need.</b></p> <p>21 Q. Have you used this lab before for full-scale</p> <p>22 fire tests?</p> <p>23 <b>A. Personally in projects that I've directly</b></p> <p>24 <b>been involved with, no; but generally speaking, yes.</b></p> <p>25 <b>That is, Exponent has used Inter-Tek, and</b></p>	<p style="text-align: right;">Page 41</p> <p>1 answered. If you have any additional reasons to</p> <p>2 provide her, that's fine.</p> <p>3 <b>A. I think the answer is, I have no reason to</b></p> <p>4 <b>measure it. It's difficult for me to answer the</b></p> <p>5 <b>question the way you put it. I had no reasons to do</b></p> <p>6 <b>it.</b></p> <p>7 Q. Did you collect any data during the tests</p> <p>8 that you performed at Inter-Tek other than</p> <p>9 photographic or videographic data?</p> <p>10 <b>A. Yes.</b></p> <p>11 Q. What data did you report?</p> <p>12 <b>A. They're essentially the materials that I've</b></p> <p>13 <b>provided here today, so my notes of the testing,</b></p> <p>14 <b>yes.</b></p> <p>15 <b>(Document marked as Kytomaa Exhibit 165A</b></p> <p>16 <b>for identification)</b></p> <p>17 Q. Is Exhibit 165A your notes of the testing?</p> <p>18 <b>A. Yes.</b></p> <p>19 Q. Okay. And I didn't see any other data other</p> <p>20 than photographs in your notebooks that you obtained</p> <p>21 from the testing, so I may have to hand it to you to</p> <p>22 let you tell me what else might be there.</p> <p>23 <b>A. That's all there is.</b></p> <p>24 Q. If I then understand correctly, you do not</p> <p>25 have data from these tests to offer any opinions on</p>



<p style="text-align: right;">Page 42</p> <p>1 whether any of these mattresses complied with TB 603 2 or CFR 1633; is that right? 3 <b>A. Right. I didn't attempt to make that 4 determination, nor do I have data for that, such a 5 determination.</b> 6 Q. Okay. And so if, in fact, you were ever 7 asked at a later date to render opinions on which 8 combustibility standards these mattresses met or 9 didn't meet, you'd have to do new tests? 10 <b>A. Well, you'd have to do something that meets 11 -- addresses that question, right, which is not what 12 I set out to do in May of 2007.</b> 13 <b>*Q. It's my understanding -- and my 14 understanding could be wrong -- that California TB 15 603 utilizes standard bed clothes like Boston IX-11; 16 is that right?</b> 17 MR. SINGER: I'm going to offer an 18 objection here. I thought the scope of this 19 deposition was going to be limited to the activity 20 he performed with respect to the product 21 identification issue. You are asking him questions 22 about technical bulletins, compliance and standards, 23 so I don't know where we're going here. 24 MS. LISER: Give me two questions, and 25 if you don't think I've gone anywhere, fine.</p>	<p style="text-align: right;">Page 44</p> <p>1 saying, but it has nothing to do with the product 2 identification issue at all. 3 MS. LISER: Okay. Well, then I'm just 4 going to ask him the questions, and you can instruct 5 him not to answer. 6 MR. SINGER: I'm not going to instruct 7 him not to answer because I don't think that's 8 ethically appropriate in this circumstance, but we 9 can always call the judge if there's going to be a 10 lot of questions according to issues that the 11 parties agreed before this deposition were not going 12 to be asked and he's not prepared to address. 13 MS. LISER: Well, I don't think that 14 finding whether or not his test protocol replicated 15 what was going on in Ms. Tolston's room is 16 irrelevant, because if your fire tests that showed 17 springs survived does not represent what happened to 18 Ms. Tolston, then it's not relevant to whether Ms. 19 Tolston's springs would have survived. 20 MR. SINGER: So if I understand what 21 you're saying, it's because Ms. Tolston was wearing 22 bed clothes -- was wearing pajamas and there was 23 bedding of some sort on the mattress that this would 24 have an impact, pursuant to a reasonable degree of 25 engineering certainty, on whether the steel coils</p>
<p style="text-align: right;">Page 43</p> <p>1 MR. SINGER: I talked to Grant about 2 this -- we've had an e-mail exchange -- and I don't 3 want to go into technical bulletins and standards. 4 That's not the purpose of this deposition today. 5 MS. LISER: That's fine. The next 6 question would make sense, and we'll just skip the 7 follow-up. 8 Q. So you don't need to answer that question, 9 Doctor. 10 Do you agree with me, Doctor, that bed 11 clothes during a mattress fire test add to the fuel 12 load? 13 MR. SINGER: Again, same objection. 14 MS. LISER: Look, she had bed clothes on 15 her mattress, and you tested mattresses without bed 16 clothes, and bed clothes add to the fuel load. 17 That's relevant. 18 MR. SINGER: But this relates to product 19 identification, whether there was innerspring coil 20 or not. 21 MS. LISER: Right, and if there's a 22 higher fuel load, then there's going to be a hotter 23 fire and more heat released in Ms. Tolston's room, 24 and I think that's very relevant. 25 MR. SINGER: I understand what you're</p>	<p style="text-align: right;">Page 45</p> <p>1 would remain? 2 MS. LISER: I think I'm entitled to ask 3 the engineer that and not you. 4 MR. SINGER: Why don't you ask him that 5 question. I think that's a fair question for you to 6 ask him. 7 MS. LISER: Okay. 8 Q. Sorry, Dr. Kytomaa. Do you agree that 9 bedding on a bed adds to the fuel load? 10 <b>A. Yes.</b> 11 Q. And you agree that the furnishings in the 12 room can add to the fire load and can increase the 13 intensity of the fire? 14 MR. SINGER: That's totally different. 15 MS. LISER: All right. We'll just 16 follow up that. 17 Q. So additional fuel load can increase the 18 intensity of the fire; is that correct? 19 <b>A. Generally speaking, yes.</b> 20 Q. All right. And do you have any reason to 21 think Ms. Tolston was on a bed with no sheets, 22 mattresses or -- I mean, sheets, blankets or 23 pillows? 24 <b>A. I would expect that there might have been 25 sheets, blankets or pillows or one of those on her</b></p>

12 (Pages 42 to 45)

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1 bed.

2 Q. The tests that you ran at Inter-Tek did not  
3 have any bed clothes on the mattress; is that  
4 correct?

5 A. We didn't have any bed clothes on the bed,  
6 but we used a burner that is designed to mimic the  
7 presence of the bed clothes.

8 Q. In what way? I mean, how does the burner do  
9 that?

10 A. The burner is actually specifically designed  
11 to mimic ignition of bed clothes, yes.

12 Q. The 603 burner?

13 A. Yes, that's correct.

14 Q. What effect, if any, would it have on the  
15 fuel load on your test to not have bed clothes?

16 A. Well, the tests that I performed used a  
17 propane burner, so essentially you're introducing  
18 propane that wasn't, if you will, in the fire room  
19 for the purpose of essentially mimicking the  
20 behavior of bed clothes in the early stages of  
21 ignition. So on the one hand you're adding fuel,  
22 and on the other hand you're taking away in the  
23 sense that there were no sheets and blankets or  
24 pillows on the tests that I performed.

25 Q. Did you allow the tests to go to flashover

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1 at Inter-Tek?

2 A. The tests that I performed did not cause  
3 flashover.

4 Q. Do you know whether or not, from your review  
5 of the fire marshal reports, the fire in Ms.  
6 Tolston's room reached flashover?

7 A. I did not review the fire reports in this  
8 case, and that really wasn't part of my scope. And  
9 so I don't know specifically whether the room  
10 flashed over or not, or I haven't really attempted  
11 to address that question.

12 Q. What does it mean to go to flashover, so  
13 I'll know that you and I are speaking on the same  
14 page?

15 A. All right. So terminology of "going to  
16 flashover" is typically associated with a condition  
17 where the fire has progressed sufficiently that a  
18 hot zone of hot gases and soot are formed in the  
19 upper regions of the compartment in question, the  
20 room in question, the fire room, that then radiate  
21 heat downwards to other combustible materials, such  
22 as furniture and carpets and other furnishings, that  
23 then essentially ignite relatively quickly, burning  
24 most of the combustibles in the room.

25 Q. So if Ms. Tolston's room -- or I'll say the

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1 fire in Ms. Tolston's room reached flashover, that  
2 would have been a condition in her room that wasn't  
3 present in the tests you ran at Inter-Tek?

4 A. Right. I mean, I don't know -- I haven't  
5 addressed the question as to whether the room  
6 reached flashover, but certainly in the Inter-Tek  
7 tests we did not reach flashover of the compartment  
8 fire.

9 Q. And can the presence of other combustibles  
10 in the compartment where the fire is taking place  
11 increase the intensity of the fire in the mattress?

12 MR. SINGER: That's been asked and  
13 answered. I object.

14 A. I mean, it really depends. There are  
15 situations, for example, where if something else is  
16 burning and the smoke layer travels downwards  
17 sufficiently quickly, that it can essentially put  
18 out a fire. So it depends on the degree of  
19 ventilation of the fire, and it depends on the  
20 degree of, let's say, fuels that can be ignited or  
21 the amount of fuels that can be ignited. And so  
22 it's not -- without any further, let's say,  
23 qualification or clarification, I don't think I can  
24 answer that question.

25 Q. Let me see if I can give you a better

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1 question then.

2 If Ms. Tolston's room contained  
3 flammable furniture, flammable draperies, curtains  
4 around her bed, that type of item, could those types  
5 of items add to the fuel load enough to cause the  
6 fire in a mattress to be of greater intensity?

7 A. So like I said, it depends a great deal on  
8 the availability of air, so ventilation of the fire.  
9 So in some situations it could. In other  
10 situations, maybe not.

11 Q. If, in fact, the door to the room was open  
12 or the window was broken so that there was  
13 availability of oxygen, would that help you answer  
14 that question?

15 A. Well, it would help me, but I haven't looked  
16 at the details associated with your question. So  
17 generally speaking, I really can't answer it.

18 But I will say that, you know, things  
19 like if the window might have been broken or if a  
20 door is open but the door in the room next door that  
21 sort of would provide air to the fire room is  
22 closed, then maybe that door doesn't -- so there are  
23 many -- I think that there are many questions. It's  
24 a complicated question, and it's not something I can  
25 answer right now.

13 (Pages 46 to 49)

<p style="text-align: right;">Page 50</p> <p>1 Q. So if I understand, there are many issues 2 you would have to look at to be able to tell me or 3 the court or the jury whether the presence of other 4 items in her room had any effect on the intensity of 5 the fire in the mattress, and that's not something 6 you can tell me today. 7 <b>A. Right.</b> 8 Q. What about the presence of medicinal oxygen 9 in the room? If someone was, either in that room or 10 the room next door, on oxygen, would that have -- or 11 can that have any effect on the intensity of the 12 fire in the mattress? 13 <b>A. If you make oxygen, pure oxygen, of which 14 there is only about 21 percent in air, available to 15 a fire directly, that certainly can increase the 16 rate at which something is burning. The ability for 17 this to have any effect on a fire really depends on, 18 you know, what is the flow rate, what is the ability 19 for the oxygen to reach the area that is burning, is 20 it getting diluted significantly by air so that the 21 concentration of oxygen near the fire is really no 22 different, things of that nature.</b> 23 <b>So yes, it's something that can have an</b> 24 <b>effect, but it's also something that may not have an</b> 25 <b>effect at times.</b></p>	<p style="text-align: right;">Page 52</p> <p>1 <b>that are documented and essentially representations</b> 2 <b>that can be made by others that were involved in</b> 3 <b>that process. I was not.</b> 4 Q. Did you specifically request that the 5 mattresses be manufactured by Creative Bedding? 6 <b>A. Well, what I requested was that we have</b> 7 <b>representative exemplars of innersprung mattresses.</b> 8 Q. Did you request that of Mr. Eldridge? 9 <b>A. Yes.</b> 10 Q. So you cannot tell me if the mattresses you 11 burned at Inter-Tek were manufactured by Creative 12 Bedding unless it's revealed on the tags that you 13 documented? 14 <b>A. Well, I believe that they were manufactured</b> 15 <b>by Creative Bedding, but I'd say -- that</b> 16 <b>representation was made to me by Brian Eldridge, but</b> 17 <b>I did not independently confirm that in any way.</b> 18 Q. Do you know whether or not the mattresses 19 that you tested at Inter-Tek were specifically 20 manufactured for your test, or were they taken off a 21 run of normally manufactured mattresses? 22 <b>A. I believe that they were manufactured for</b> 23 <b>our purposes.</b> 24 Q. What work did you do to confirm that the 25 mattresses you tested at Inter-Tek met the same</p>
<p style="text-align: right;">Page 51</p> <p>1 Q. And you don't have enough information, as 2 you sit here today, to be able to tell me or the 3 court whether there was the presence of pure oxygen 4 and whether it would have had any effect at all? 5 <b>A. That's correct.</b> 6 Q. And, of course, the tests that you did at 7 Inter-Tek didn't have any other combustibles in the 8 fire compartment. It had just the mattress and the 9 frame upon which the mattress was resting. 10 <b>A. Correct, and the burner. The burner that</b> 11 <b>provided gas that burned.</b> 12 Q. Where did you obtain the six mattresses that 13 Exponent has, including the four that were actually 14 burned? 15 <b>A. So these were manufactured by -- these were</b> 16 <b>Medline mattresses that came from Medline and</b> 17 <b>Creative Bedding. These were manufactured and then</b> 18 <b>sent directly to Inter-Tek, and the arrangements</b> 19 <b>were made by Brian Eldridge's office for that to</b> 20 <b>happen.</b> 21 Q. Do you know whether or not the four 22 mattresses that you burned at Inter-Tek were 23 actually manufactured by Creative Bedding? 24 <b>A. I don't specifically know exactly where they</b> 25 <b>were manufactured other than what's on the labels</b></p>	<p style="text-align: right;">Page 53</p> <p>1 specifications as the mattresses which were 2 delivered to National Healthcare? 3 <b>A. I did not, let's say, perform any</b> 4 <b>independent verification of that. I requested that</b> 5 <b>the innersprung mattresses be representative of the</b> 6 <b>ones that were delivered to NHC Nashville, and I</b> 7 <b>think that the -- well, the exercise of ensuring</b> 8 <b>that that was the case was overseen by Brian</b> 9 <b>Eldridge and other people at -- probably at Creative</b> 10 <b>Bedding.</b> 11 Q. Was there anyone at Exponent, other than you, 12 that would have played a role in confirming that the 13 mattresses you tested at Inter-Tek met the same 14 specifications of the mattresses delivered to NHC? 15 <b>A. No.</b> 16 Q. Okay. So your statement in your -- well, 17 I'm not actually sure you even said that in your 18 affidavit, but any statement that you would make 19 that the mattresses you tested at Inter-Tek met the 20 same specifications of the mattresses that were 21 delivered to NHC were based upon information given 22 to you by Mr. Eldridge? 23 <b>A. Yes.</b> 24 Q. Okay. 25 <b>A. And let me just be clear. With respect to</b></p>



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1 **the innersprung mattresses, right. Because there**  
 2 **were foam mattresses and innersprung mattresses.**  
 3 Q. Were you ever -- let me back up.  
 4 Do you know who, if anyone, at Creative  
 5 Bedding would have played a role in trying to make  
 6 sure that the mattresses you tested met the same  
 7 specifications as the ones delivered to NHC?  
 8 **A. I don't know specifically.**  
 9 Q. Were you ever given any specifications or  
 10 any documents that showed you the characteristics of  
 11 the mattresses delivered to NHC?  
 12 Do you want me to try that again? Is  
 13 that --  
 14 **A. Well, the only information I have associated**  
 15 **with that is Hollman's testimony.**  
 16 Q. So you've not been given any internal  
 17 specifications that Medline or Creative Bedding  
 18 might have used back in the 1990s on how they  
 19 constructed mattresses then?  
 20 **A. No.**  
 21 Q. Have you been given any specifications on  
 22 how Medline has their mattresses manufactured in  
 23 2007?  
 24 **A. No.**  
 25 Q. Did you read any other depositions other

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1 than Mr. Hollman's deposition taken in 2007?  
 2 **A. No.**  
 3 Q. Do you know whether or not Creative Bedding  
 4 still makes mattresses for Medline?  
 5 **A. I don't know.**  
 6 Q. Have you ever spoken with anyone directly at  
 7 Medline, as opposed to one of their attorneys, about  
 8 the mattresses you were given?  
 9 **A. No.**  
 10 Q. I sort of asked this, but I'm not sure I  
 11 asked the right question. Did you ever speak to  
 12 anyone at Creative Bedding, as opposed to one of  
 13 their attorneys, about the mattresses you needed and  
 14 what you were given?  
 15 **A. No.**  
 16 **(Documents marked as Kytomaa Exhibits**  
 17 **166A and 167A for identification)**  
 18 Q. Doctor, I've handed you Exhibits 166A and  
 19 167A, which were photographs given to me by Mr.  
 20 Eldridge or Mr. Singer. Do you recognize those  
 21 photographs?  
 22 **A. I do.**  
 23 Q. Can you tell me what those are?  
 24 **A. These are photographs that I took of the**  
 25 **innerspring array from the burn test that we**

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1 **performed at Inter-Tek.**  
 2 Q. Do you know, from looking at those  
 3 photographs or from your recollection, whether those  
 4 were taken after the mattress that contained those  
 5 units had been burned?  
 6 **A. Oh, clearly that is the case, that these**  
 7 **photographs were taken after the mattresses or, in**  
 8 **fact, in this case the one mattress was burned.**  
 9 Q. Okay.  
 10 **A. These two exhibits, 166A and 167A, come from**  
 11 **the same mattress.**  
 12 Q. How can you tell that?  
 13 **A. Just from the appearance of the debris. You**  
 14 **can see the debris is the same.**  
 15 Q. Did you take pictures of the remaining  
 16 innerspring array from both innerspring mattresses  
 17 you burned?  
 18 **A. Yes.**  
 19 Q. Did they appear identical? And you're  
 20 welcome to look at your pictures.  
 21 **A. Sure. I'm not sure I understand your**  
 22 **question. Did they appear -- that is, did the**  
 23 **innersprings from the two mattresses appear**  
 24 **identical, or did the multiple photographs of the**  
 25 **other mattress innersprings appear identical to one**

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1 **another?**  
 2 Q. The two sets of photos from the two units,  
 3 did they appear to be identical?  
 4 **A. I have photographs right here. These are**  
 5 **the others.**  
 6 **So essentially what you put in front of**  
 7 **me was Exhibits 166 and 167, which were photographs**  
 8 **that you printed out from my CD or DVD. And here**  
 9 **you can see additional photographs of the**  
 10 **innerspring array here being held up by one of the**  
 11 **technicians at Inter-Tek, and here you can see with**  
 12 **a degree that differs in appearance from Exhibits**  
 13 **166 and 167A.**  
 14 **But generally speaking, the innerspring**  
 15 **arrays look the same.**  
 16 Q. Do you mind if I mark those so that when we  
 17 look at this later we'll remember what you were  
 18 talking about?  
 19 **A. By all means.**  
 20 MR. SINGER: We can take photocopies of  
 21 that, too. Would that be better?  
 22 MS. LISER: That would be fine.  
 23 MR. SINGER: There are people here who  
 24 can help us with that. Were there any others that  
 25 you wanted to have photocopied?

15 (Pages 54 to 57)